decade, but the traffic shows an annual increase of 3 per cent. on the average. Goods traffic is being increased faster than passenger traffic. A steady increase of gross receipts, a greater increase of expenditure, and a smaller, but still important, increase of net receipts is shown for the period and is expected to continue. Passengers pay an average of one cent per kilometer, and goods two cents per kilometer, just the reverse of American rates, but, there as here, about two-thirds of the revenue comes from freight. The bonded capital is two or three times as great as that represented by stock.

After summarizing the facts, and showing that the railways are likely to be increasingly profitable in the future, the question of state ownership is discussed, not as a theoretical, but as a practical question, and is answered in the negative, not because of any difficulties connected with state ownership or management, but because it is believed that no feasible means of acquiring the roads from their present owners can be devised.

W. H.

A Treatise on Money and Essays on Monetary Problems. By J. SHIELD NICHOLSON. Second Edition. London: A. & C. Black, 1893. 8vo. pp. xvi+415.

THE first one-fourth of this volume is taken up with eight elementary chapters on parts of the theory of money, in which, however, only those subjects are treated which prepare the way for subsequent arguments in favor of bimetallism. Part II., or three-fourths of the book, contains fourteen chapters, devoted to special topics, not necessarily related, but chiefly devoted to an exposition of bimetallism. In short, the volume is a presentation wholly favorable to bimetallism.

The author's cardinal doctrine is the quantity theory. But, as in other writers, it is not easy to get a definite statement of the theory. In his theoretical chapter (p. 93) he says: "The quantity of standard money, *other things remaining the same*, determines the general level of prices." And since the qualifying clause may include much, this is not a very definite statement. Yet, in his use of principles in later chapters, he finds the quantity of money the sole cause (p. 166): "The key to the present controversy on the connection between the currency and the fall in prices is found in the dependence of prices on the quantity of standard metallic money." And, more strongly

still he claims (p. 198) "For with every increase in the volume of trade and the numbers of people, with expansion of commerce, into new regions, with every displacement of old customs by competition and contract, a greater demand is made on gold for currency. But the amount of gold produced is diminishing, and the amount absorbed by manufacturers and by the East is increasing."

In the judgment of the writer this position is by no means substantiated by Mr. Nicholson. The quantity of money has an influence on the level of prices only as one of a number of forces. The quantity of money needed in the world is determined by the monetary demand; and this is affected by the character, intelligence, business habits trade conditions, and banking system of a country. Each country, by virtue of its business habits, determines unconsciously the amount of gold it will use in its machinery of exchange. But price is a ratio of gold to goods. Whatever affects the gold side of the comparison, either through demand for or supply of gold, will affect the value of gold, and so will affect the relation to goods as expressed by price. Also, whatever affects the cost of producing goods, will affect the value of goods, and so alter the relation of goods to gold, as expressed by price. Hence the quantity of money is but one of many forces, producing the level of prices, as a resultant; and it is quite possible that two forces may be at work, antagonizing each other. For instance, a great increase in the supply of gold (such as has taken place since 1850) would lower its value, and tend to raise the level of of prices; but an exceptional reduction in the cost of producing goods (such as has marked the last half of the present century, as never before in the history of the world) would act to lower the value of goods relatively to gold, or lower the level of prices. That is, the two forces offset each other. Such an analysis may account for the fact that prices in the United States were in 1879 on exactly the same level as in 1860; and in 1890 were only about 8 per cent. lower. Those who advocate the "quantity theory" in its most intelligent form seem to be treating the causes of change in the level of prices in a one-sided way. In order to discuss them fully, one must study carefully the demand and supply side of gold; then the possible changes in cost of production on the side of goods; and finally indicate the proportionate force of each of the elements at work to produce the resultant. A fall of prices *per se* is no evidence whatever of a scarcity of gold. For these reasons and many others which our space will not allow us to dis-

cuss, the student of money finds this volume far from satisfactory. It is unsatisfying, not because one may disagree with its conclusions, but because it does nothing to clear up the vagueness enveloping the subject of money.

The quantity theory can hold, according to its most scientific advocates, only by an exact limitation of the quantity of legal money, as compared with the money-work. Hence, wherever free coinage of a metallic money exists, the bullion value of it cannot differ from its coin value. Or, in other words, the quantity theory would hold true only in supposed communities where no exchanges of goods were made except by offers of metallic money, and where free coinage of the metal was not allowed. Such a theory is, of course, wholly useless to explain existing conditions ; for not only is gold but one part of the machinery of exchange, but free coinage of gold is general. Nor is it sufficient to say that the quantity theory is one form of the general theory of demand and supply already proved. For granting that, it by no means follows that prices will be fixed by the quantity of metallic money in circulation. Only in so far as the quantity of the metal, taken with the monetary and non-monetary demand, and taken also in connection with the supply, indicates a change in the forces affecting the money side of the price-comparison, can it produce a change in the level of prices.

In other ways this volume is also unsatisfactory. It agrees, for instance, with that curious product of German agrarian politics which urges that "the depreciation of silver acts like a bounty given on exports from India and like a protective duty imposed on imports to India" (p. 202). This statement implies that silver prices in India have not risen as silver has fallen ; and this is Mr. Nicholson's opinion (p. 55 where he even affirms an appreciation of silver in India). But this is in direct conflict with the prices furnished by Mr. O'Connor to the Herschell committee :

Articles	1861–1865	1866–1870	1891
Rice	103	130	149
Wheat	103	133	135
Jawar	122	140	138
Bajra	120	131	137
Ragi	149	185	138
Gram	88	149	129
Barley	80	108	131

These prices, moreover, are those of articles which have felt a marked influence from improvements tending to reduce cost. That is, their silver prices have risen in spite of improvements. Still further, the exports of wheat from India since 1882 (the first normal period since the famines) show the tendency to increase, the year 1892 alone being exceptional.

The tendency to exaggerate the quantity factor, not only in fixing the level of prices, but even in conditioning the political existence, appears in this work, where the author naïvely remarks (p. 61): "The decline of the Roman Empire was largely due to a deficiency of the circulating medium." When such authors as Mr. Nicholson go so far as this, it should excite no wonder that our silver advocates occasionally urge bizarre theories.

J. LAURENCE LAUGHLIN.

Monetary Systems of the World. A Study of Present Currency Systems and Statistical Information Relative to the Volume of the World's Money, with Complete Abstracts of Various Plans Proposed for the Solution of the Currency Problem. By MAURICE L. MUHLMAN, Deputy Assistant Treasurer of the United States. New York: Charles H. Nicoll, 189 Broadway, 1895. 8vo. pp. 198.

READERS will find in this little volume a large amount of useful information on monetary legislation, coinage, circulation, banking and the like, for all the countries of the world. To the United States thirty-five pages are given, and only seven to Great Britain, and eight to all the countries of the Latin Union; so that the book favors American readers. And twenty-four pages are devoted to tables and figures on the volume of American currency, which furnishes in convenient form considerable data of importance, not easily accessible to the public. The "abstracts of propositions for the solution of the currency problem," is a curious feature, which will afford posterity some amusement.

Without any attempt at literary exposition, the author aims merely to furnish a statistical handbook. It is somewhat crudely put together; but it can, no doubt, be improved in later editions. There are frequent inaccuracies to which we might call attention. For instance, (p. 54), the act retiring the trade dollars was not that of March 3, 1877,